Air Quality Permitting
Statement of Basis

June 10, 2005

Permit to Construct No. P-040319

Jack B. Parson Companies, Portable

Facility ID No. 777-00140

Prepared by:

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AIR QUALITY DIVISION

FINAL

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Acronyms, Units, and Chemical Nomenclatures

ACFM	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic feet
EPA	U.S. Environmental Protection Agency
gr	grain (1 lb = 7,000 grains)
HAPs	Hazardous Air Pollutants
HMA	hot mix asphalt
hp	horsepower
hr	hour
hr/yr	hours per year
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
m	meter(s)
MACT	Maximum Achievable Control Technology
MMBtu	million British thermal units
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NSPS	New Source Performance Standards
O_3	ozone
PCDD	polychlorinated dibenzo-para dioxins
PCDF	polychlorinated dibenzo furans
PM	particulate matter
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PSD	Prevention of Significant Deterioration
PTC	permit to construct
PTE	potential to emit
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_x	sulfur oxides
TCDD	Tetrachlorodibenzo-p-dioxin
T/yr	tons per year
µg/g	micrograms per gram
$\mu g/m^3$	micrograms per cubic meter
UTM	Universal Transverse Mercator
VOC	volatile organic compound

1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing permits to construct.

2. FACILITY DESCRIPTION

The facility consists of a portable hot mix asphalt plant with a rated production capacity of 450 T/hr. The plant is a drum mix design and is equipped with a baghouse to control air pollutant emissions. Source file documentation indicates that this plant is subject to 40 CFR 60-Subpart I. Source co-location with a rock crusher is included in the existing Tier II/PTC.

The facility is allowed to remediate soil and aggregates that have been contaminated with petroleum substances. The contaminated soil and/or aggregate material is introduced into the drum dryer with other materials that may include asphalt and non-contaminated aggregate, to produce asphaltic concrete with the desired physical and mechanical properties.

3. FACILITY / AREA CLASSIFICATION

Jack B. Parson Companies (Jack B. Parson) portable hot mix asphalt plant is defined as a synthetic minor facility because, without permit limits on the potential to emit, the PM_{10}, SO_2, and NO_x emissions would exceed 100 tons per year. The AIRS classification is "SM" because the potential to emit of PM_{10}, SO_2, and NO_x is limited to less than major source levels.

The facility is portable and is permitted to locate and operate anywhere within the state of Idaho except for the Sandpoint PM_{10} Non-attainment Area.

The AIRS information provided in Appendix C defines the classification for each regulated air pollutant at Jack B. Parson. This required information is entered into the EPA AIRs database.

4. APPLICATION SCOPE

The PTC application requests the ability to remediate soil and aggregate materials contaminated with on-specification used oil at rates of 200 T/hr and 87,000 T/yr of these materials. The permittee will not accept any RCRA-regulated remediation material to make certain that RCRA regulations do not apply to their soil remediation operation.

This facility is already permitted to remediate soil and aggregates contaminated with virgin gasoline and oil products. This modification request expands the allowable remediation material to include on-specification used oil in addition to materials already permitted.

4.1 Application Chronology

September 3, 2004	DEQ received a PTC modification application from Jack B. Parson
October 1, 2004	DEQ declared the PTC application incomplete
December 28, 2005	DEQ received a response to the incompleteness determination from Jack B. Parson for a PTC modification to the facility's PTC/Tier II permit
January 28, 2005	DEQ received a revised table of emissions estimates reflecting potential emissions listed in tons per year

January 28, 2005 DEQ declared the application complete

Table 5.1 EQUIPMENT LISTING

Source Description	Rated Production Capacity (T/hr)	Heat Input capacity of Burner (MMBtu/hr)	Allowable Burner Fuel Types	Emissions Control
Hot mix asphalt plant Manufacturer: Cedarapids Type: Drum-mix	450	80	No. 1 or No. 2 distillate, No. 4, 5, and 6 residual, and on-specification used oil	Type: Baghouse Manufacturer: Standard Havens Model: Alpha Mark III

5. PERMIT ANALYSIS

This section of the Statement of Basis describes the regulatory requirements for this PTC action.

5.1 Equipment Listing

Source 777-00140 is a portable hot mix asphalt plant.

5.2 Emissions Inventory

Lead, TAPs and HAPs increases are anticipated to occur due to the remediation of used oil contaminated soil and aggregate. These pollutants were quantified and the following assumptions were used as a basis to quantify the air pollutant emissions rate increases:

> Jack B. Parson is permitted to use soil and aggregate contaminated with virgin oil in the production process. This establishes the baseline for any emissions increases. The potential increase in emissions would result from using on-specification used oil contaminated soil and aggregate compared to the baseline virgin oil contaminated soil and aggregate. The permittee applied an extremely conservative assumption that 100% of the remediation material is either on-specification used oil or virgin oil, and none of the material was assumed to consist of soil or aggregate. This is a situation that the permittee explained will not happen in practice because they do not intend to process contaminated soil and aggregate that contains free liquid product, but is considered a worst case assumption.

The emissions factors were obtained from AP-42 Section 11.1—Hot Mix Asphalt Plants, March 2004. These emission factors are established on a basis of pounds of pollutant per ton of hot mix asphalt produced and are for combustion of the used oil and virgin oil fuels.

Criteria Air Pollutants

Criteria air pollutants were not predicted to increase except for lead. AP-42 Table 11.1-3 footnote "g" indicates that PM and PM_{10} emissions factors are identical for "waste" (or used) oil combustion and virgin No. 2 distillate fuel oil combustion. AP-42 Table 11.1-7 contains emissions factors that also are identical for waste oil and No. 2 distillate fuel oil for NO_x and CO emissions.

Based on Table 11.1-7, the SO_2 emission factor for waste oil is approximately five times greater than the emission factor for No. 2 distillate fuel oil. However, this HMA plant is already permitted to remediate soil and aggregate contaminated by any grade of virgin oil, which may consist of any grade of distillate or residual fuel oils. Therefore, there is not an identifiable increase of sulfur contained in the on-specification used oil versus the virgin oil contaminated soil. AP-42 Section 11.1 does not contain any emission factors that differentiate SO_2 emissions rates between waste oil and ASTM Grades 4, 5, or 6 residual fuel oils.

Additional supporting information used to verify that SO_2 emissions would not increase was found in the document titled Emission Factor Documentation for AP-42 Section 1.11 Waste Oil Combustion, by Edward Aul & Associates, Inc. and E. H. Pechan & Associates, Inc., Contract No. 68-DO-0120, for the Office of Air Quality Planning and Standards, U.S. EPA, April 1993. Emissions of SO_2 for hot mix asphalt production are analogous to SO_2 emissions from combustion in boilers and furnaces. Based on the typical sulfur content data presented in this document SO_2 emissions for waste oil should be less than for residual fuel oil based on the average sulfur content for waste oil of 5,000 µg/g, and 10,000 µg/g for residual oil (refer to Appendix B to review the pertinent sections of the waste oil support documentation).

Lead emissions were predicted to increase by an amount equal to the level allowed to be present in on-specification used oil, which is 100 parts per million (ppm) by weight. Hourly emission rates of lead were estimated using a contaminated soil and aggregate throughput of 200 T/hr, and the annual emission rate of lead was estimated using an annual throughput of 87,000 T HMA/yr. The production data, a concentration of 100 ppm by weight, and the filterable particulate matter control efficiency for a fabric filter-controlled drum dryer HMA plant were used by the permittee to estimate lead emissions.

The filterable PM control efficiency was estimated by the permittee using the filterable PM emission factors for uncontrolled and controlled drum mix HMAs, listed in AP-42 Table 11.1-3, released March 2004. The control efficiency calculation is listed below:

Filterable PM Control Efficiency (%) = (1.00 - (0.014 lb/ton / 28 lb/ton)) * 100

Filterable PM Control Efficiency (%) = 99.95%

Lead emissions were estimated using the following method, including the assumed control efficiency of 99.95% for PM emissions:

Hourly Emissions

Controlled hourly lead emissions (lb/hr) = (100 ppm by weight) * (1 part / 1E+06 parts) * (200 T/hr) * (1 – (99.95 / 100))

Controlled hourly lead emissions = 1.0E-05 lb/hr

Annual Emissions

Controlled annual lead emissions (T/yr) = Controlled hourly emissions (lb/hr) * (annual production / hourly production) * (1 ton / 2000 lb)

Controlled annual lead emissions (T/yr) = 1.0E-05 lb/hr * (87,000 T/yr / 200 T/hr) * (1 ton/2000 lb)

Controlled annual lead emissions = 2.18E-06 T/yr.

TAPs

Emissions of hydrogen chloride (HCl) are estimated to be below the screening emissions limit of 0.05 lb/hr. Based upon the permittee's requested throughput limitation of 200 T/hr and the emission factor of 0.00021lb HCl/ton throughput from AP-42 Table 11.1-8, the predicted emissions rate of HCl is 0.042 lb/hr. This emission factor was developed for combustion of waste oil in the burner section of drum mix asphalt plant and not the remediation of contaminated soil in the drum dryer section in the production of hot mix asphalt so the HCl emission rate is conservative but follows the same methodology for emissions calculations as the other TAPs. Emissions of HCl are anticipated to be less than 0.042 lb/hr, which is below the IDAPA 58.01.01.585 screening limit of 0.05 lb/hr.

Arsenic (As), cadmium (Cd), chromium (Cr), lead (Pb), and total halogens were identified by DEQ in the October 1, 2004 incompleteness letter as regulated air pollutants whose emissions rates could potentially increase from processing used oil contaminated soil and aggregate in the HMA plant. The emission rates of these substances were estimated using the concentration limits for on-specification used oil listed in 40 CFR 279.11. The applicable limitations are listed below in Table 5.2.

Table 5.2 CONTAMINANT CONCENTRATION LIMITS

Substance	Contaminant Concentration Limit (Parts per million by weight)
Arsenic	5
Cadmium	2
Chromium	10
Lead	100
Total Halogens	1000

Hourly emission rates of metallic TAPs were estimated using a contaminated soil and aggregate throughput rate of 200 T/hr, and annual emissions for demonstration of compliance with IDAPA 58.01.01.586 TAPs AACCs were estimated using an annual throughput of 87,000 T/yr of material. Hourly emissions of each pollutant were calculated by multiplying the allowable contaminant concentration by the requested hourly throughput of 200 T/hr and dividing by a factor of 1 million, which is the factor for converting from 1 parts per million, by weight, of contaminant.

The production data, allowable concentration of each specie of contaminant for on-specification used oil, and the filterable particulate matter control efficiency for a fabric filter-controlled drum dryer HMA plant were used by the permittee to estimate the TAPs emissions for the metallic TAPs listed in Table 5.2. Metallic TAPs emissions calculations follow the same method as for lead emissions discussed above.

The permittee assumed that all chromium was emitted as hexavalent chromium, which is a carcinogenic TAP regulated by IDAPA 58.01.01.586. Hexavalent chromium has a more stringent allowable ambient concentration than chromium or chromium compounds regulated under IDAPA 58.01.01.585.

Emissions of halogens were assumed to be uncontrolled by the fabric filter control equipment. The permittee assumed that 100% of the allowable halogen content was a single specie of TAP and processed at the requested hourly and annual capacities for contaminated soil remediation. See Page 2 of Appendix A to review the table titled "Exclusion of Halogenated Compound Presence in Used Oil" to review the permittee's emission estimates and reasons for excluding the substances from the expected constituents of used oil.

Dioxins and furans emissions were estimated using a factor for total PCDD/PCDF of 1.2E-10 lb/ton, which was obtained from AP-42 Table 11.1-10, released March 2004, for a fuel oil or a waste oil-fired drum dryer HMA plant controlled by a baghouse (referred to as a fabric filter in the table). The permittee's application is conservative because the total PCDD/PCDF was included in the TAPs compliance demonstration. The emission factor is applicable for either virgin fuel oil-fired or waste oil-(a.k.a used oil-) fired HMA plants, so it could be argued that there is no emission increase of dioxins and furans from using used oil contaminated materials in the remediation process versus using virgin oil contaminated materials, which have already been permitted in PTC/Tier II permit No. 777-00140, issued September 18, 2002.

The total PCDD/PCDF emission rates were quantified by the following method:

(1.2E-10 lb/ton HMA) * (200 T HMA/hr) = 2.4E-08 lb/hr

(1.2E-10 lb/ton HMA) * (87,000 T HMA/yr) * (1 ton/ 2000 lb) = 5.2E-09 T/yr.

A summary of TAPs emission increases associated with this project are listed below in Table 5.3.

Table 5.3 SUMMARY OF CONTROLLED TAPS EMISSION RATES

TAP Substance	TAPs Emissions (lb/hr)	Screening Emissions Rate (lb/hr)	Modeling Required? Yes or No	TAPs Emissions (T/yr)
Arsenic	5.00E-07	1.50E-06	No	1.09E-07
Cadmium	2.00E-07	3.70E-07	No	4.35E-08
Chromium	1.00E-06	5.60E-07	Yes	2.18E-07
Total Halogens	2.00E-01	Varies according to the specific compound	Yes, depending on the specific halogenated compound	4.35E-02
Total Dioxins and Furans	2.40E-08	1.50E-10	Yes	5.22E-09

5.3 Modeling

Dispersion modeling was submitted by the permittee for the drum dryer baghouse stack using the SCREEN3 dispersion model. The stack was modeled as a single emissions point at the emissions rate of 1 lb/hr. The maximum predicted ambient impact concentration at a unit emissions rate were multiplied by the source's emissions rate to obtain the predicted source ambient concentration. Building and structure downwash, complex terrain, and elevated terrain were not incorporated in the modeling analysis. Receptor heights were established at ground elevation. This approach is consistent with the modeling analysis contained in the technical memorandum for issuance of the September 18, 2002 Tier II/PTC permit. See Appendix C to review the SCREEN3 modeling output and input values.

Table 5.4 is the summary of the stack parameters used in the modeling.

Table 5.4 SUMMARY OF THE STACK PARAMETERS

Point Source	Stack Height	Stack Diameter	Exhaust Velocity	Stack Temperature	Stack Exit Configuration
HMA Plant	(ft)	(ft)	(ft/sec)	^{0}F	Horizontal or Vertical Release
Drum Dryer Stack	39.0	5.15	26.7	260	Vertical

Criteria Air Pollutants

Ambient impacts for lead were estimated by multiplying the maximum one-hour ambient impact obtained from the SCREEN3 model by the emission rate for lead. The maximum ambient impact value is added to the background concentration for each pollutant and averaging period to verify whether compliance with the NAAQS has been demonstrated. The only criteria air pollutant whose emissions were anticipated to increase due to the modification request was lead.

Table 5.5 lists the design ambient concentration for the drum dryer baghouse stack. An estimate of the ambient impact for lead was determined using the same method as for TAPs. The persistence factor for a quarterly basis averaging period is 0.13. Persistence factors were obtained from Appendix A—Persistence Factors for Use with SCREEN3, of the *State of Idaho Air Quality Modeling Guideline*, Idaho Department of Environmental Quality, Air Quality Division, Stationary Source Program, December 31, 2002. The ambient background concentration for lead was based on a DEQ default value as provided in a DEQ Background Concentration Memorandum (R. Hardy, K. Schilling, *Background Concentrations for Use in New Source Review Dispersion Modeling*, March 14, 2003).

Table 5.6 provides the summary of the plant ambient impacts for lead emissions. Ambient impacts of lead were below the applicable standard.

Table 5.5 DESIGN CONCENTRATION

Source	SCREEN3 Maximum Ambient Impact	
	($\mu g/m^3$, 1-hour average)	($\mu g/m^3$, annual average)
Drum Dryer Baghouse Stack	3.2	2.0E-02

Table 5.6 MODELING RESULTS-ATTAINMENT AND UNCLASSIFIABLE AREAS

Pollutant	Averaging Period	Predicted Ambient Impact ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Ambient Concentration ($\mu g/m^3$)	Regulatory Limit ($\mu g/m^3$)	Percent of Standard
Lead	Quarterly	2.07E-07	0.03	0.03	1.5	2.0

The SCREEN3 modeling output files can be found in Appendix C of the Statement of Basis.

TAPs Impact Analysis

The worst-case emissions estimates for the proposed modification were used in this analysis. The permittee assumed that each individual TAP compound comprised the entire allowable halogenated compound limit of 1,000 ppm by weight for used oil.

Emissions of hexavalent chromium, total dioxins and furans, and individual halogenated compounds exceeded the screening emissions limitations and required an ambient impact analysis to demonstrate compliance with the AACC increments.

The annual ambient impact for each carcinogenic TAP was derived by multiplying the maximum 1-hour average design concentration by a persistence factor of 0.125 and a ratio of requested potential operating hours to total potential operating hours (435 hr/yr / 8,760 hr/yr).

The predicted maximum ambient impacts for total dioxins and furans and hexavalent chromium resulted in ambient impacts that were below the AACC for each pollutant. The predicted maximum ambient concentration for the 14 individual halogenated compounds exceeded the AACC. Refer to the table titled "Exclusion of Halogenated Compound Presence in Used Oil" in Appendix A of this memorandum to review the predicted maximum ambient concentration of each substance that is a halogenated compound. According to the application materials the halogenated compounds are not expected to be present in used oil.

The detailed results are listed in Table 5.6.

Table 5.6 CARCINOGENIC TAPs AMBIENT IMPACTS

Pollutant	CAS Number	Averaging Period	Maximum Concentration ($\mu g/m^3$)	Regulatory Limit (ug/m^3)	Percent of Increment (%)
Chromium (as Cr+6)	7440-47-3	Annual	1.99E-08	8.3E-05	0.02
Total Dioxins & Furans (as 2,3,7,8-TCDD	1746-01-6	Annual	4.78E-10	2.2E-08	2.2
Other Halogens	Dependent upon individual chemical	Annual	3.98E-03	Varies (See Appendix A)	Varies

5.4 Regulatory Review

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

IDAPA 58.01.01.201 ..... Permit to Construct Required

Permit Condition 4.3 in Tier II/PTC permit No. 030306 specifically prohibited the use of soils and aggregates contaminated by used or waste oil in Permit Condition 4.3. Therefore, the request by the permittee to do so constitutes a modification to the existing permit. The permit will allow the remediation of on-specification used oil, gasoline, and any grade of fuel oil-contaminated soil and aggregate.

IDAPA 58.01.01.210 ..... Demonstration of Preconstruction Compliance with Toxic Standards

The requested modification is anticipated to create potential increases in TAPs. The potential increases in TAPs emissions were estimated based on a soil remediation throughput rate of 200 T/hr, which amounts to 4,800 T/day on a 24-hour basis. Annual throughput is limited to 87,000 tons per year. The annual throughput was used to establish annual emissions for carcinogenic TAPs.

DEQ's October 1, 2004 incompleteness letter identified arsenic, cadmium, chromium, and total halogens as TAPs emissions rates that could potentially increase from processing used oil contaminated soil and aggregate in the HMA plant. Jack B. Parson has accepted a permit limitation on the concentration of these substances in the used oil contaminated soil and aggregate that is at or below the thresholds for on-specification used oil under the RCRA regulatory standard specified in 40 CFR 279.11. Jack B. Parson will not accept any material that is regulated under RCRA as a regulated waste for remediation in the production of hot mix asphalt in order to address potential emissions of halogenated compound contaminants that may be present in the remediation material. These materials include polychlorinated biphenyls (PCBs), pesticides, and herbicides of sufficient concentration to be identified as a RCRA regulated waste.

Several halogenated TAP compounds were identified by the permittee as potentially being in the used oil-contaminated soil and aggregate. Each of these halogenated substances was assumed to be emitted as 100% of the allowable 1000 ppm by weight of total halogens. The permittee explained that these substances are generally used as insecticides, herbicides, pesticides, laboratory chemical reagents, dry cleaning agents, or as an anesthetic. It was assumed by the permittee that these materials are not anticipated to be present in the in used oil at any level of significance. An argument explaining why each TAP is not expected to be present in the used oil was presented by the permittee. Therefore, a T-RACT determination was not required for these TAPs. See the table titled "Exclusion of Halogenated Compound Presence in Used Oil" in Appendix A of this memorandum to review the reasons provided for excluding these compounds from consideration as potential TAPs for this modification.

IDAPA 58.01.01.300 ..... Procedures and Requirements for Tier I Operating Permits

This facility is a synthetic minor facility and is not subject to Tier I major source permitting requirements. This permit modification does not alter the minor source status of this facility.

40 CFR 60 Subpart I ..... Standards of Performance for Hot Mix Asphalt Facilities

Part 60 of Title 40 (Protection of the Environment) of the Code of Federal Regulations, also known as New Source Performance Standards (NSPS), imposes standards of performance on facilities constructed or modified after that source category's applicability date. With respect to hot mix asphalt plants, NSPS sets the particulate emission standard at 0.04 gr/dscf, the visible emission standard at 20% opacity, and the Reference Method tests (RM 5 and 9, respectively) for evaluating compliance with those standards. The source category applicability date is June 11, 1973.

The facility is subject to 40 CFR 60 Subpart I and the emissions limitations are included in the existing Tier II/PTC. This project does not alter the applicability of 40 CFR 60—Subpart I and does not affect any permit conditions that address the NSPS standards, monitoring, recordkeeping, or testing requirements.

5.5 Permit Conditions Review

This section lists only those permit conditions that have changed or have been deleted as a result of this permit revision.

Permit Condition 3.11

Permit Condition 3.11 was altered to include the used oil-contaminated soil or aggregate as material subject to the RCRA limits for on-specification used oil. Section 4 of the permit addresses the remediation process for contaminated soil and aggregate, and the header paragraph of Section 4 states that the permittee is to comply with Permit Conditions 3.1 through 3.15 in addition to the permit conditions in Section 4 of the permit. The new permit language is highlighted in bolded and italicized font. Permit Condition 3.11 now reads:

3.11 Used Oil Specifications

The concentrations/parameters of contaminants in any used-oil fuel ***or used oil-contaminated soil or aggregate*** shall not exceed the following levels, as defined in 40 CFR 279.11:

Arsenic	5 ppm by weight
Cadmium	2 ppm by weight
Chromium	10 ppm by weight
Lead	100 ppm by weight
Total halogens	1,000 ppm by weight

Permit Condition 3.13

Permit condition 3.13 was added to the permit. This condition is being added as a standard condition to portable source permits to reflect the Sandpoint PM_{10} SIP's requirements. Numbering of subsequent permit conditions in Section 3 was altered accordingly. Permit Condition 3.13 reads:

3.13 Sandpoint PM_{10} Nonattainment Area

The permittee shall not locate the portable hot mix asphalt plant in the Sandpoint PM_{10} nonattainment area. The permittee may submit an air quality permit to construct application which requests the ability to locate this facility within the Sandpoint PM_{10} nonattainment area.

Permit Condition 4.1

Permit Condition 4.1 was altered to allow the facility to process on-specification used oil contaminated soil and aggregates in hot mix asphalt production. An operating limitation was included in the permit condition that was used as the basis to calculate the hourly emissions rates of TAPs regulated by IDAPA 58.01.01.585, which are based on a 24-hour average. This value is 4,800 tons per day based on continuous 24-hour daily operation at the requested processing capacity of 200 tons per hour of used oil-contaminated soil and aggregate. This amount of material which was requested to be processed in a 24-hour period was included as a permit limitation. Virgin petroleum product-contaminated soil and aggregate is not included in this limitation.

The permit limits the daily production of hot mix asphalt to 3,195 tons per day when co-located with the rock crusher (portable source 777-00141) in a PM_{10} nonattainment area. Remediation of 4,800 tons per day of used oil-contaminated soil and aggregate in the production of hot mix asphalt would exceed this limitation.

The new permit language is highlighted in bolded and italicized font.

4.1 Petroleum-Contaminated Soil and Aggregate Throughput Limit

The maximum amount of petroleum-contaminated soil and aggregate to be remediated by the hot-mix asphalt facility shall not exceed 87,000 tons per any consecutive 12-month period.

The maximum amount of used oil-contaminated soil and aggregate to be remediated shall not exceed 4,800 tons per any consecutive 24-hour period. The permittee shall comply with the hot mix asphalt production limitations specified in Permit Condition 3.6 while operating in a PM_{10} nonattainment area.

All remediated materials shall be used in conjunction with the production of asphalt.

Permit Condition 4.3

The original Permit condition 4.3 was deleted. The deleted condition is listed below.

4.3 Waste Oil and Used Oil

The permittee shall not remediate any soil or aggregate contaminated with waste oil or used oil.

Permit Condition 4.3 was replaced with the following condition:

4.3 Used Oil Contaminated Soil and Aggregate

The permittee shall not remediate used oil-contaminated soil or aggregate material that is a RCRA hazardous waste.

Permit Condition 4.4

Permit Condition 4.4 was altered by adding the monitoring and recordkeeping requirements for the daily throughput limit on used oil-contaminated soil and aggregate specified in Permit Condition 4.1. Modified Permit Condition 4.4 is listed below with the additional monitoring and recordkeeping requirement identified by bolded and italicized font. Permit Condition 4.4 now reads:

4.4 ***Petroleum Contaminated Soil and Aggregate***

The permittee shall monitor and record the amount of petroleum-contaminated soil and aggregate remediated by this hot-mix asphalt facility on a monthly and annual basis to demonstrate compliance with Permit Condition 4.1. The throughput shall be recorded as tons per month, and tons per any consecutive 12-month period (T/yr) for all remediated soil and aggregate.

Used Oil Contaminated Soil and Aggregate

The permittee shall monitor and record the amount of used oil-contaminated soil and aggregate remediated by this hot-mix asphalt facility on daily, monthly, and annual bases in units of tons per day, tons per month, and tons per any consecutive 12-month period (T/yr).

The permit contains a requirement for Jack B. Parson to monitor and record the amount of used oil-contaminated soil and aggregate processed in the production of HMA on a daily basis. This requirement was included to demonstrate compliance with the daily production and related emissions estimates that correspond to the requested processing scenario of 200 T/hr at 24 hr/day of used oil-contaminated soil and aggregate.

Monthly and annual monitoring and recordkeeping requirements apply to both virgin petroleum-contaminated materials and used oil-contaminated materials. The annual limitation on both varieties of petroleum contaminated soil is 87,000 T/yr in any combination. These requirements were established in the original permit allowing the remediation of contaminated materials, and were applied to the used oil-contaminated material.

Permit Condition 4.5

Permit Condition 4.5 was changed to reflect that the used oil contaminated material is to be analyzed to verify that the levels of the compounds in the material comply with the allowable levels of contaminants in used oil regulated under 40 CFR 279.11. The facility is not allowed to remediate any materials identified as a RCRA hazardous waste in Permit Condition 4.3. This condition provides documentation to demonstrate compliance with this restriction.

4.5 Gasoline Concentration ***and Used Oil Contaminant*** Monitoring

All petroleum product ***and used oil***-contaminated soil and aggregate to be remediated by this hot-mix asphalt facility shall be analyzed by an independent laboratory to demonstrate compliance with Permit Condition***s 3.11 and*** 4.2.

All other permit conditions remain unchanged.

6. FEE REVIEW

A $1000.00 application fee was submitted with the application on December 30, 2004.

The PTC processing fee required by IDAPA 58.01.01.225 is $1000.00 for a new source or modification to an existing source with an increase of emissions less than one ton per. The emissions increase associated with this modification is listed in Table 5.1. Emissions of TAPs/HAPs and VOCs were not double-counted. The $1000.00 processing fee was received by DEQ on June 10, 2005.

Jack B. Parson is a synthetic minor facility for major source Tier I permitting. Tier I fees do not apply. This PTC modification does not affect Tier I major source status and fees.

Table 5.1 PTC PROCESSING FEE TABLE

Emissions Inventory			
Pollutant	**Annual Emissions Increase (T/yr)**	**Annual Emissions Reduction (T/yr)**	**Annual Emissions Change (T/yr)**
NO_X	0.0	0	0.0
SO_2	0.0	0	0.0
CO	0.0	0	0.0
PM_{10}	0.0	0	0.0
VOC	0.0	0	0.0
TAPS/HAPS	0.044	0	0.044
Total:	0.044	0	**0.044**
Fee Due	**$ 1,000.00**		

7. PERMIT REVIEW

7.1 *Regional Review of Draft Permit*

On March 16, 2005 a draft permit was provided to the Pocatello Regional Office.

The Pocatello Regional Office's comments were incorporated as follows:

The Pocatello Regional Office requested that the Tier II/PTC permit be altered to accommodate co-location with any rock crusher, rather than portable crusher 777-00141, which was owned by Jack B. Parson Companies and permitted for co-location with this portable HMA plant. The regional office commented that this rock crusher may have been sold. The Stationary Source Programs Office determined that the crusher must be permitted for co-location and that there may be potential conflicts with PM_{10} non-attainment area SIP provisions. Therefore, the comment was not incorporated in this permitting action.

7.2 *Facility Review of Draft Permit*

February 3, 2005	DEQ received a request from Staker & Parson Companies to receive a facility draft of the permit.
March 28, 2005	A facility draft permit was issued to Jack B. Parson Companies.
April 4, 2005	DEQ received comments from Jack B. Parson Companies on the facility draft PTC. The comments and DEQ's responses are included below:

Jack B. Parson Comment #1

Section 5 Responsible Official: Please change to Chuck Lindsay, Operations Manager, (208) 232-5796

DEQ Response to Comment #1

The requested change has been made in the T2/PTC.

Jack B. Parson Comment #2

Section 1.1 Purpose: Please add "fuel oil" to the list of approved contaminants for remediation to clarify that diesel fuel and residual fuel oil contaminated soil is acceptable for remediation.

DEQ Response to Comment #2

The requested change has been made in the T2/PTC.

Jack B. Parson Comment #3

Jack B. Parson Companies submitted a check for $1000 to cover the processing fees in December of 2004. The check number 253815 was paid to the Idaho Department of Environmental Quality on January 3, 2005.

DEQ Response to Comment #3

Submittal of a $1000.00 processing fee is required by IDAPA 58.01.01.225. The $1000.00 fee paid by Jack B. Parson Companies on January 3, 2005 was applied to the initial PTC processing fee required by IDAPA 58.01.01.224.

7.3 Public Comment

An opportunity for public comment period on the PTC application was provided in accordance with IDAPA 58.01.01.209.01.c. During this time, there were not comments on the application and no requests for a public comment period on DEQ's proposed action.

8. RECOMMENDATION

Based on review of application materials, and all applicable state and federal rules and regulations, staff recommend that Jack B. Parson be issued a final Tier II/PTC No. P-040319 to allow the use of used oil contaminated soil and aggregate for the purpose of soil remediation in the manufacture of hot mix asphalt. No public comment period is recommended, no entity has requested a comment period, and the project does not involve PSD requirements.

DM/sd Permit No. P-040319 G:\Air Quality\Stationary Source\SS Ltd\PTC\Jack B. Parson\FINAL\P-040319 Final SOB2.doc

APPENDIX A

EMISSION ESTIMATES AND PERMITTEE'S MODELING

Received
Friday, JANUARY 28, 2005
1+ AND-DELIVERED

Jack B. Parson Companies Portable Hot Mix Asphalt Plant
Used Oil Petroleum Contaminated Soil (PCS) Remediation
AIRS Facility #777-00140
Permit Modification Calculations (Revised)

Assumptions/Requirements:

Remediation of used oil PCS will be limited to:	87,000 T/yr	200 T/hr
The used oil PCS concentration is 100%.		
Only on-specification used oil contaminated soil will be used.		
All incoming PCS will be characterized before acceptance.		
The plant is a drum mix with a fabric filter baghouse with a 99.95% efficiency.		
(The efficiency is calculated using AP-42 Table 11.1.3 uncontrolled and controlled particulate emission factors; 28/0.014)		
All metal emissions will be in particulate or fume form		
There will be no increase in criteria pollutants, except lead, as a result of the remediation of used oil PCS.		

Emissions Calculations

Pollutant	PPM Factor*	Uncontrolled Emission Factor (lb/ton)	Uncontrolled Emissions (lb/hr)	Controlled Emissions (lb/hr)	Control Efficiency (%)	Controlled Emissions (lb/hr)	Controlled Emissions (tpy)
As	5	1.00E-06	1.00E-03	2.18E-04	0.0005	5.00E-07	1.09E-07
Cd	2	1.00E-06	4.00E-04	8.70E-05	0.0005	2.00E-07	4.35E-08
Cr	10	1.00E-06	2.00E-03	4.35E-04	0.0005	1.00E-06	2.18E-07
Pb	100	1.00E-06	2.00E-02	4.35E-03	0.0005	1.00E-05	2.18E-06
Other Halogens	1000	1.00E-06	2.00E-01	4.35E-02	n/a	2.00E-01	4.35E-02
Dioxins/Furans	n/a	1.20E-10	2.40E-08	5.22E-09	n/a	2.40E-08	5.22E-09

* Definition of on-specification (non-RCRA regulated) used oil from 40 CFR 279
** AP-42, Table 11.1.3 - Particulate emissions for drum mix asphalt plant with baghouse uncontrolled vs. controlled emission factors.
Dioxins and Furans as 2,3,7,8-TCDD - Emission Factors from AP-42 Table 11.1-10

Modeling Analysis

1-hr average concentration at 1.0lb/hr using SCREEN3 = 3.207 ug/m^3

Pollutant	Controlled Emissions (lb/hr)	Screening Level (ug/m^3)	Below Screening Level?	Modeled Concentration (ug/m^3)	Annual Average Concentration (ug/m^3)	AAAQS (ug/m^3)	Below AAAQS?
As	5.00E-07	1.50E-06	Y	1.60E-06	9.95E-09	2.30E-04	Y
Cd	2.00E-07	3.70E-06	Y	6.41E-07	3.98E-09	5.60E-04	Y
Cr	1.00E-06	5.60E-07	N	3.21E-06	1.99E-08	8.30E-05	Y
Pb	1.00E-05	n/a	n/a	3.21E-05	2.07E-07	1.50E00**	Y
Other Halogens	2.00E-01	varies	n/a	6.41E-01	3.98E-03	varies	Y
Dioxins/Furans	2.40E-08	1.50E-10	N	7.70E-08	4.78E-10	2.20E-08	Y

* *IDAPA 58.01.01.586 Toxic Air Pollutants Carcinogenic Increments*
** Lead is not a TAP. The ambient air quality standard is on a quartly basis.
The values for lead in the table are for a quarterly average concentration.

Jack B. Parson Companies Portable Hot Mix Asphalt Plant
Used Oil Petroleum Contaminated Soil (PCS) Remediation
AIRS Facility #777-00140
Exclusion of Halogenated Compound Presence in Used Oil

CAS	Chemical Name	[illegible]	[illegible]	[illegible]
111-44-4	Bis(2-Chloroethyl)ether	2.00E-05	3.00E-03	This material is used as a chemical intermediate for organic compounds and polymers (*SRI), in the treatment of textiles (*Merck 1976) and in dry cleaning (*Hawley 1977), as a pesticide (*NRC 1977; *Farm Chemicals Handbook 1977), as an anesthetic (*IARC 1972-1986).
542-88-1	Bis(Chloromethyl)ether	1.00E-07	1.60E-05	Used as a research chemical and lab reagent (*Hawley 1977; *SRI). Not produced commercially in the U.S. (*SRI), but was formerly used for chloromethylation in industry (*ACGIH 1980). Has been used as an alkylating agent in the manufacture of polymers (*Sittig 1981). May be produced as chemical intermediate (*IARC 1972 - present).
57-74-9	Chlordane	1.80E-04	2.70E-03	Originally used as a pesticide on field crops such as corn and citrus fruits, and later used to control termites in homes. Its use and production were cancelled in April 1988, because of concern over cancer risk, evidence of human exposure and accumulation in body fat, persistence in the environment, and danger to wildlife. All aboveground uses had stopped by 1983. Between 1983 and 1988, chlordane was used only as a pesticide for termites.
96-12-8	1,2-Dibromo-3-Chloropropane	1.00E-06	1.60E-04	Large amounts of 1,2-dibromo-3-chloropropane were used in the past on certain farms to kill pests that harmed crops. Farmers in all states other than Hawaii stopped using this chemical in 1979. Hawaii stopped using it in 1985.
542-75-6	1,3-dichloropropene	1.90E-07	2.90E-06	1,3-dichloropropene has been used extensively as a pre-plant soil fumigant since 1956, with a recent increase in use due to the restriction of ethylene dibromide, dibromochloropropane, and methyl bromide. 1,3-dichloropropene is used to kill nematodes, insects, and weeds on potatoes, tomatoes, tobacco, pineapples, flower bulbs, and other vegetable and orchard crops in the United States, Europe, Japan, the Philippines, and Africa (Cox, 1992).
764-41-0	1,4-Dichloro-2-butene	2.50E-06	3.80E-04	Used as an intermediate in chemical manufacturing; [HSDB]
76-44-8	Heptachlor	5.10E-06	7.70E-04	Was commonly used by exterminators and homeowners to control and kill termites, and by farmers to kill insects in seed grains and on crops. Heptachlor epoxide is an oxidation product of heptachlor formed by many plants and animals, including people, after exposure to heptachlor. Heptachlor is present as an impurity in the pesticide chlordane. Since late 1978, most uses of heptachlor have been phased out; the chemical is no longer available to the general public. As of April 1988, heptachlor can no longer be used for the underground control of termites.
1024-57-3	Heptachlor Epoxide	2.50E-06	3.50E-04	This is a breakdown product of heptachlor.
118-74-1	Hexachlorobenzene	1.30E-05	2.00E-03	Used as a seed dressing; fungicide treating seed; in the manufacture of pyrotechnics, tracer bullets; fluxing agent in the manufacture of aluminum. wood-preserving agent; porosity-control agent in the manufacture of graphite anodes; peptizing agent in the production of nitroso and styrene rubber for tires.
	Hexachlorocyclo-hexane, technical	1.30E-05	1.90E-03	Contains alpha-, ß-, and gama HCH
319-84-6	Hexachlorocyclohexane (Lindane) Alpha (BHC)	3.70E-06	5.60E-04	alpha- and ß-HCH are basically by-products (and impurities) in the manufacture of lindane (>99% gamma-HCH).
319-85-7	Hexachlorocyclohexane (Lindane) Beta (BHC)	1.30E-05	1.80E-03	alpha- and ß-HCH are basically by-products (and impurities) in the manufacture of lindane (>99% gamma-HCH).
319-86-8	b-hexachlorocyclohexane	1.30E-06	1.90E-04	Same as the other HCH compounds.
58-89-9	Hexachlorocyclohexane (Lindane) Gama (BHC)	1.70E-05	2.60E-03	It is used agriculturally to protect seeds against pests, and to kill insects in soil, and pharmaceutically in lice and scabies shampoos.

APPENDIX B

WASTE OIL SULFUR DIOXIDE SUPPORT INFORMATION

EMISSION FACTOR DOCUMENTATION FOR

AP-42 SECTION 1.11

WASTE OIL COMBUSTION

Prepared by:

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Contract No. 68-DO-0120
EPA Work Assignment Officer: Michael Hamlin

Office of Air Quality Planning and Standards
Office Of Air And Radiation
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711
April 1993

alternative to combustion modification, the properties of the waste oil can be modified by blending with the fuel oil, to the extent required to accomplish a clean burning fuel mixture.

2.3 EMISSIONS

The emissions from waste oil burning reflect the compositional variations of the waste oils. A partial list of the inorganic species found in a representative waste oil are compared with those same species found in distillate and residual oil (see Table 2-1).

2.3.1 Particulate Matter Emissions[3]

Ash in the waste oil was much higher than ash in the distillate oils and was also higher than the ash in the residual oils. The waste oil had substantially higher concentrations of most of the trace elements reported than those concentrations found in the virgin oils. However, because of the shift to unleaded gasoline, waste crankcase oils contain lower concentrations of lead now than was the case when the representative waste oil was analyzed in 1983.

Without controls, higher concentrations of ash and trace metals in the waste fuel extrapolate to higher emission levels of total particulate matter (PM) and trace metals in the flue gas emissions.

Low efficiency pretreatment steps, such as large particle removal with screens or coarse filters, are common prefeed procedures at oil-fired boilers. Reductions in total PM emissions are expected from these techniques but little or no effect will be noticed on the level of small particles below the size of 10 micrometers (PM-10). Pretreatment steps were usually not well defined in the references containing emissions data for waste oil combustion.

2.3.2 Sulfur Dioxide Emissions[3]

Average sulfur concentrations of waste oil, distillate oil, and residual oil were reported in Table 2-1 as follows:

- Waste oil: 5,000 micrograms per gram
- Distillate oil: 2,400 micrograms per gram
- Residual oil: 10,000 micrograms per gram

These results suggest that uncontrolled SO_2 emissions will increase when waste oil is substituted for a distillate oil but will decrease when residual oil is replaced. As stated above,

combustors which already burn distillate or residual oils are those most amenable for fuel substitution with waste oils or with waste oil added to the virgin fuel.

2.3.3 Chlorinated Organic Emissions[2,3]

Constituent chlorine in the waste oils exceeded the concentration of chlorine in the two types of virgin oil. High levels of halogenated solvents are often found in waste oil as a result of inadvertent or deliberate additions of the contaminant solvents with the waste oils. Many efficient combustors can destroy more than 99.99 percent of the chlorinated solvents present in the fuel. However, given the wide array of combustor types that burn waste oils, the presence of these compounds in the emission stream cannot be ruled out. Also, they raise the level of hydrochloric acid (HCl) in the emission stream.

2.3.4 Other Organic Emissions[2,4,5]

The flue gases from waste oil combustion need to be monitored for organic compounds other than chlorinated solvents. At parts per million by weight (ppmw) levels, some of the 170 organic compounds and organic classifications listed as hazardous under Title III of the Clean Air Act have been found in waste oils. Benzene and toluene were reported at concentrations over 5 percent. Polychlorinated biphenyls (PCBs) and polychlorinated dibenzo dioxins (dioxins) have been detected in waste oil samples. Additionally, these hazardous compounds may be formed in the combustion process as products of incomplete combustion (PICs).

2.4 CONTROL TECHNOLOGIES

Emissions can be controlled by the pretreatment of the waste oil to remove the pollutant precursors or with emission controls to remove the air pollutants.

2.4.1 Pretreatment[3]

Reduction of emission levels is not the only purpose of pretreatment of the waste oil. Improvement in combustion efficiency and reduction of erosion and corrosion of the combustor internal surfaces are important considerations. The most common pretreatment scheme uses sedimentation followed by filtration. Water and large particles are removed without having much effect on sulfur, nitrogen, or chlorine contents. Other methods of pretreatment involve clay contacting; demetallization by acid, solvent, or chemical contacting; and thermal processing to remove residual water and light ends. These latter processes might be attractive as waste reduction schemes or to recycle the waste oil, but the added costs probably hinder their use as part of a combustion process.

TABLE 2-1. TYPICAL CONCENTRATIONS OF SELECTED CONTAMINANTS IN WASTE OIL AND IN DISTILLATE AND RESIDUAL FUEL OILS
(All Concentrations in ug/g)

	Waste oil		Distillate oil		Residual oil	
Contaminant	Average concentration	Concentration range	Average concentration	Concentration range	Average concentration	Concentration range
Ash	6500	1000-12000	25	–	2500	–
Chlorine	2200	1000-6700	100	–	12	3-380
Nitrogen	1000	100-2800	300	100-600	3500	1500-5000
Sulfur	5000	2700-7500	2400	500-6000	10000	2000-28000
Trace elements						
Aluminum	45	2-640	8	0.3-33	3.8	0.3-19
Arsenic	12	1-100	0.8	0.1-0.2	0.8	0.02-2.0
Barium	66	9-160	0.5	0.4-14	1.3	0.3-3.4
Cadmium	1	0.6-2.8	0.3	0.1-0.9	2.3	0.01-0.9
Chromium	6	1-37	1.3	0.5-2.8	1.3	0.1-1.7
Iron	240	58-1300	12	4-79	18	2-2200
Lead	1100*	170-2100	1.8	0.5-4.4	3.5	0.1-8.0
Magnesium	260	5-590	6.3	0.8-6.5	13	0.8-760
Vanadium	3	0.1-13	1.6	0.05-17	160	1-110
Zinc	800	90-1550	3.6	0.6-6.4	1.3	0.6-35

* Lead levels have decreased since these values were determined in 1982 and 1983.

APPENDIX C

SCREEN3 MODELING OUTPUT FILE

01/03/05
13:25:20

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 95250 ***

Jack Parsons HMA Plant 777-00140 PTC Mod used oil soil remediation

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	.126000
STACK HEIGHT (M)	=	11.8900
STK INSIDE DIAM (M)	=	1.5700
STK EXIT VELOCITY (M/S)	=	8.1412
STK GAS EXIT TEMP (K)	=	400.0000
AMBIENT AIR TEMP (K)	=	293.0000
RECEPTOR HEIGHT (M)	=	.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	.0000
MIN HORIZ BLDG DIM (M)	=	.0000
MAX HORIZ BLDG DIM (M)	=	.0000

BUOY. FLUX = 13.160 M**4/S**3; MOM. FLUX = 29.917 M**4/S**2.

*** FULL METEOROLOGY ***

****
*** SCREEN AUTOMATED DISTANCES ***
****

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.0	320.0	158.14	2.18	2.14	NO
100.	.3134	3	10.0	10.2	3200.0	24.24	12.67	7.78	NO
200.	2.841	4	20.0	20.5	6400.0	15.64	15.67	8.69	NO
300.	3.113	4	20.0	20.5	6400.0	15.64	22.70	12.27	NO
400.	2.798	4	15.0	15.4	4800.0	18.46	29.58	15.51	NO
500.	2.509	4	10.0	10.3	3200.0	24.09	36.38	18.76	NO
600.	2.263	4	10.0	10.3	3200.0	24.09	42.92	21.61	NO
700.	2.069	4	8.0	8.2	2560.0	28.32	49.46	24.58	NO
800.	1.872	4	8.0	8.2	2560.0	28.32	55.81	27.27	NO
900.	1.686	4	5.0	5.1	1600.0	40.74	62.43	30.60	NO
1000.	1.614	4	5.0	5.1	1600.0	40.74	68.62	33.13	NO
1100.	1.519	4	5.0	5.1	1600.0	40.74	74.77	35.11	NO
1200.	1.436	4	4.5	4.6	1440.0	43.94	80.96	37.24	NO
1300.	1.357	4	4.5	4.6	1440.0	43.94	87.00	39.09	NO
1400.	1.293	4	4.0	4.1	1280.0	47.95	93.12	41.17	NO
1500.	1.231	4	4.0	4.1	1280.0	47.95	99.08	42.92	NO
1600.	1.176	4	3.5	3.6	1120.0	53.10	105.15	45.01	NO
1700.	1.128	4	3.5	3.6	1120.0	53.10	111.03	46.68	NO
1800.	1.081	4	3.5	3.6	1120.0	53.10	116.88	48.32	NO
1900.	1.108	5	1.0	1.1	10000.0	80.66	93.44	37.91	NO
2000.	1.150	5	1.0	1.1	10000.0	80.66	97.70	38.83	NO
2100.	1.179	5	1.0	1.1	10000.0	80.66	101.94	39.65	NO
2200.	1.204	5	1.0	1.1	10000.0	80.66	106.17	40.45	NO
2300.	1.226	5	1.0	1.1	10000.0	80.66	110.39	41.25	NO
2400.	1.244	5	1.0	1.1	10000.0	80.66	114.59	42.04	NO
2500.	1.259	5	1.0	1.1	10000.0	80.66	118.78	42.82	NO
2600.	1.271	5	1.0	1.1	10000.0	80.66	122.95	43.59	NO

SCREEN

2700.	1.281	5	1.0	1.1	10000.0	80.66	127.11	44.34	NO
2800.	1.288	5	1.0	1.1	10000.0	80.66	131.26	45.09	NO
2900.	1.293	5	1.0	1.1	10000.0	80.66	135.40	45.84	NO
3000.	1.296	5	1.0	1.1	10000.0	80.66	139.52	46.57	NO
3500.	1.290	5	1.0	1.1	10000.0	80.66	159.97	50.12	NO
4000.	1.269	6	1.0	1.1	10000.0	68.30	120.25	34.79	NO
4500.	1.285	6	1.0	1.1	10000.0	68.30	133.48	36.34	NO
5000.	1.287	6	1.0	1.1	10000.0	68.30	146.56	37.81	NO
5500.	1.280	6	1.0	1.1	10000.0	68.30	159.51	39.22	NO
6000.	1.264	6	1.0	1.1	10000.0	68.30	172.33	40.57	NO
6500.	1.244	6	1.0	1.1	10000.0	68.30	185.05	41.87	NO
7000.	1.221	6	1.0	1.1	10000.0	68.30	197.65	43.13	NO
7500.	1.190	6	1.0	1.1	10000.0	68.30	210.16	44.21	NO
8000.	1.159	6	1.0	1.1	10000.0	68.30	222.57	45.25	NO
8500.	1.128	6	1.0	1.1	10000.0	68.30	234.89	46.26	NO
9000.	1.098	6	1.0	1.1	10000.0	68.30	247.13	47.23	NO
9500.	1.069	6	1.0	1.1	10000.0	68.30	259.30	48.18	NO
10000.	1.040	6	1.0	1.1	10000.0	68.30	271.38	49.10	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:

259.	3.207	4	20.0	20.5	6400.0	15.64	19.93	10.87	NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

****
*** SUMMARY OF SCREEN MODEL RESULTS ***
****

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	3.207	259.	0.

****
** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
****

APPENDIX D

AIRS INFORMATION

AIRS/AFS[a] FACILITY-WIDE CLASSIFICATION[b] DATA ENTRY FORM

Facility Name: Jack B. Parson Companies
Facility Location: Portable
AIRS Number: 777-00140

AIR PROGRAM POLLUTANT	SIP	PSD	NSPS (Part 60)	NESHAPS (Part 61)	MACT (Part 63)	SM80	TITLE V	AREA CLASSIFICATION (Attainment or Unclassified or Nonattainment)
SO_2	SM						SM	U
NO_x	SM						SM	U
CO	B							U
PM_{10}	SM						SM	U
PT (Particulate)	SM		SM				SM	U
VOC								
THAP (Total HAPs)								
			APPLICABLE SUBPART					
			I					

[a] Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

[b] AIRS/AFS Classification Codes:

A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, or each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.

SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.

B = Actual and potential emissions below all applicable major source thresholds.

C = Class is unknown.

ND = Major source thresholds are not defined (e.g., radionuclides).